BROADBAND POWER AMPLIFIER
ABP0600-07-3629

Features:

- Broad band operation from 0.4 GHz to 6.0 GHz
- Low VSWR, unconditional stable
- SMA female connector I/O.
- Single DC power supply, internal voltage regulator, operating voltage from +15V
- Operating temperature -40~+75°C, storage temperature -55~+125°C

General Description

ABP0600-07-3629 is a three stage GaAs MMIC HEMT based broadband power amplifier module operating in the frequency from 0.4 to 6.0GHz. The amplifier provides 36dB of small signal gain and 29dBm typical output power at 1 dB gain compression point. The amplifier requires only a single positive DC power supply. Its built-in DC voltage regulator allows the amplifier to functional at different DC supply voltages without affecting the RF performances.

Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	0.4		6.0
Small Signal Gain @25°C	dB	34.0	36.0	39.0
Noise Figure @25°C	dB		5.0	6.0
P-1dB Compression Point	dBm	+28.0	+29.0	
Output IP3	dBm	+35.0	+39.0	
Gain flatness	dB		+/-1.0	+/-1.5
Gain Variation over temp.	dB		+/-2.0	
Input VSWR			1.8:1	2.0:1
Output VSWR			2.0:1	2.5:1
Reverse Isolation	dB	45.0	50.0	
Non-Harmonic Spurious	dBc			-60.0
Operating Temperature	°C	-40		+75
Survival Temperature	°C	-55		+125
DC Voltage	V	+13.0	+15.0	+18.0
DC Supply Current	mA	480 mA	530 mA	650 mA
In/Out connectors		SMA Female		
Size	inches	1.5”x1.0”x0.4”		

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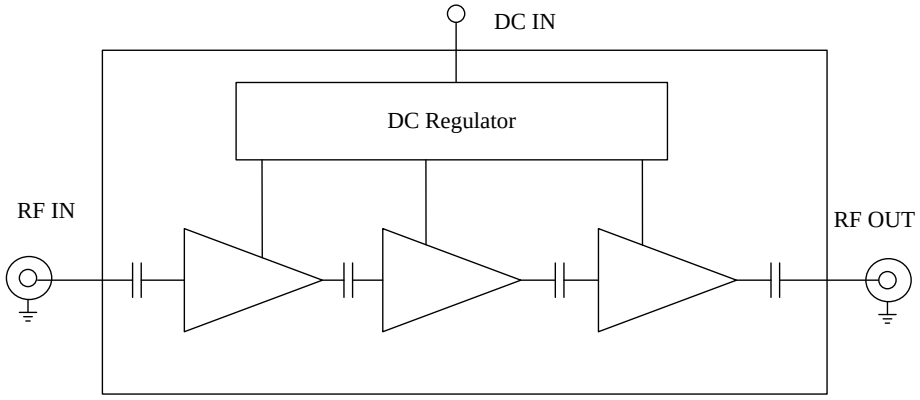
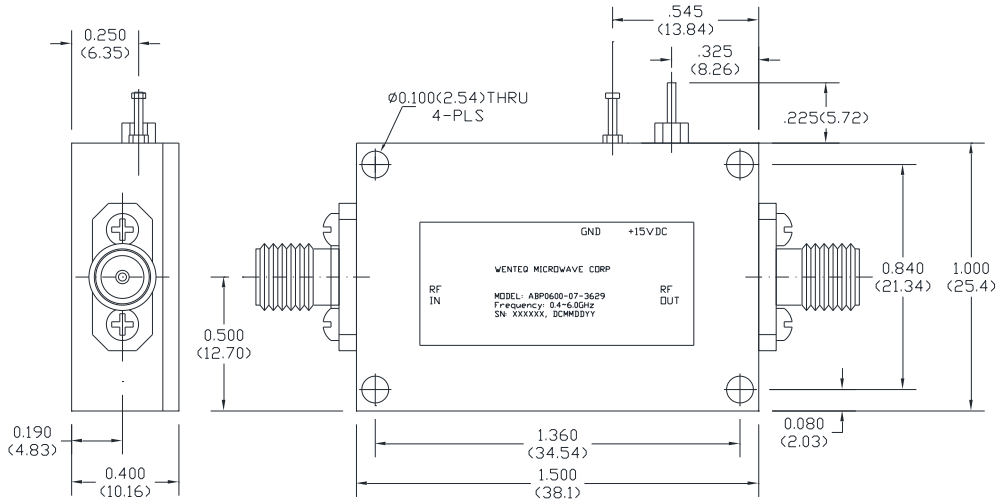
Functional Diagram



Mechanical Structure:



Note: All units in inches (mm).

Housing Material and Surface Finish:

Body and cover material: aluminum
Surface finish: nickel plated
Connector material: Copper
Connector surface finish: gold plated

Absolute Maximum Ratings

DC Voltage	+18V
RF Input Power	0 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C